



Prevention Quality Indicators (PQI) Benchmark Data Tables, v2022

Prepared for:

Agency for Healthcare Research and Quality
U.S. Department of Health and Human Services
5600 Fishers Lane
Rockville, MD 20857
<https://qualityindicators.ahrq.gov>

Contract No. HHSA290201800003G

July 2022

Table of Contents

Introduction.....	1
Acknowledgments.....	1
PQI Benchmark Tables.....	3

Index of Tables

Table 1. Prevention Quality Indicators (PQI) for Overall Population: Area-Level Indicators.....	3
Table 2. PQI 01 – Diabetes Short-Term Complications Admission Rate	4
Table 3. PQI 03 – Diabetes Long-Term Complications Admission Rate	4
Table 4. PQI 05 – Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate.....	4
Table 5. PQI 07 – Hypertension Admission Rate.....	5
Table 6. PQI 08 – Heart Failure Admission Rate.....	5
Table 7. PQI 11 – Community-Acquired Pneumonia Admission Rate.....	5
Table 8. PQI 12 – Urinary Tract Infection Admission Rate.....	6
Table 9. PQI 14 – Uncontrolled Diabetes Admission Rate	6
Table 10. PQI 15 – Asthma in Younger Adults Admission Rate.....	6
Table 11. PQI 16 – Lower-Extremity Amputation Among Patients with Diabetes Rate.....	7
Table 12. PQI 90 – Prevention Quality Overall Composite ^a	7
Table 13. PQI 91 – Prevention Quality Acute Composite ^a	7
Table 14. PQI 92 – Prevention Quality Chronic Composite ^a	8
Table 15. PQI 93 – Prevention Quality Diabetic Composite ^a	8

Introduction

The data presented in this document are nationwide comparative rates for Version 2022 of Agency for Healthcare Research and Quality (AHRQ) Quality Indicators™ (QI) Prevention Quality Indicators (PQI) software. The numerators, denominators, and observed rates shown in this document are based on an analysis of discharge data from the 2019 AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID).

HCUP is a family of healthcare databases and related software tools and products developed through a Federal-State-Industry partnership. HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. The SID contains all-payer, encounter-level information on inpatient discharges, including clinical and resource information typically found on a billing record, such as patient demographics, up to 30 *International Classification of Diseases, Tenth Revision, Clinical Modification/Procedural Classification System (ICD-10-CM/PCS)* diagnoses and procedures, length of stay, expected payer, admission and discharge dates, and discharge disposition. In 2019, the HCUP databases represented more than 97 percent of all annual discharges in the United States.

The analytic dataset used to generate the tables in this document consists of the same hospital discharge records that comprise the reference population for Version 2022 of the AHRQ QI software. This reference population file was limited to community hospitals and also excludes rehabilitation and long-term acute care (LTAC) hospitals. Information on the type of hospital was obtained by the American Hospital Association (AHA) Annual Survey of Hospitals. AHA defines community hospitals as “all non-Federal, short-term, general, and other specialty hospitals, excluding hospital units of institutions.” Included among community hospitals are specialty hospitals such as obstetrics-gynecology, ear-nose-throat, orthopedic, and pediatric institutions. Also included are public hospitals and academic medical centers.

The 2019 HCUP SID includes information on all inpatient discharges from hospitals in participating States. Discharges from all 48 participating States are used to develop area-level indicators.¹

Additional information on the reference population and the risk adjustment process may be found in Quality Indicator Empirical Methods, available on the AHRQ QI™ website.
(<http://www.qualityindicators.ahrq.gov/modules/Default.aspx>)

The QI observed rates for area-level indicators are per 100,000 population. Cell sizes less than 11 are suppressed due to confidentiality; and are designated by an asterisk (*). When only one data point in a series must be suppressed due to cell sizes, another data point is provided as a range to disallow calculation of the masked variable. In some cases, numerators, denominators, or rates are not applicable for the category due to the exclusion criteria in the specification of the indicator and are designated by dashes (--).

Acknowledgments

¹ States in the 2019 reference population for the area-level indicators include: AK, AR, AZ, CA, CO, CT, DC, DE, FL, GA, HI, IA, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, MT, NC, ND, NE, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV, and WY.

The AHRQ QI program would like to acknowledge the HCUP Partner organizations that participated in the HCUP SID: **Alaska** State Hospital and Nursing Home Association, **Alaska** Department of Health and Social Services, **Arizona** Department of Health Services, **Arkansas** Department of Health, **California** Department of Health Care Access and Information, **Colorado** Hospital Association, **Connecticut** Hospital Association, **Delaware** Division of Public Health, **District of Columbia** Hospital Association, **Florida** Agency for Health Care Administration, **Georgia** Hospital Association, **Hawaii** Laulima Data Alliance, a non-profit subsidiary of the Healthcare Association of Hawaii, **Hawaii** University of Hawaii at Hilo, **Illinois** Department of Public Health, **Indiana** Hospital Association, **Iowa** Hospital Association, **Kansas** Hospital Association, **Kentucky** Cabinet for Health and Family Services, **Louisiana** Department of Health, **Maine** Health Data Organization, **Maryland** Health Services Cost Review Commission, **Massachusetts** Center for Health Information and Analysis, **Michigan** Health & Hospital Association, **Minnesota** Hospital Association (provides data for Minnesota and North Dakota), **Mississippi** State Department of Health, **Missouri** Hospital Industry Data Institute, **Montana** Hospital Association, **Nebraska** Hospital Association, **Nevada** Department of Health and Human Services, **New Hampshire** Department of Health & Human Services, **New Jersey** Department of Health, **New Mexico** Department of Health, **New York** State Department of Health, **North Carolina** Department of Health and Human Services, **North Dakota** (data provided by the Minnesota Hospital Association), **Ohio** Hospital Association, **Oklahoma** State Department of Health, **Oregon** Association of Hospitals and Health Systems, **Oregon** Office of Health Analytics, **Pennsylvania** Health Care Cost Containment Council, **Rhode Island** Department of Health, **South Carolina** Revenue and Fiscal Affairs Office, **South Dakota** Association of Healthcare Organizations, **Tennessee** Hospital Association, **Texas** Department of State Health Services, **Utah** Department of Health, **Vermont** Association of Hospitals and Health Systems, **Virginia** Health Information, **Washington** State Department of Health, **West Virginia** Department of Health and Human Resources, **Wisconsin** Department of Health Services, **Wyoming** Hospital Association.

PQI Benchmark Tables

Table 1. Prevention Quality Indicators (PQI) for Overall Population: Area-Level Indicators

INDICATOR	LABEL	NUMERATOR	DENOMINATOR*	OBSERVED RATE PER 100,000 POPULATION
PQI 01	Diabetes Short-Term Complications Admission Rate	206,095	250,081,195	82.41
PQI 03	Diabetes Long-Term Complications Admission Rate	289,125	250,081,514	115.61
PQI 05	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate	553,573	154,015,167	359.43
PQI 07	Hypertension Admission Rate	156,426	250,081,304	62.55
PQI 08	Heart Failure Admission Rate	1,103,278	250,088,145	441.16
PQI 11	Community-Acquired Pneumonia Admission Rate	443,581	250,084,360	177.37
PQI 12	Urinary Tract Infection Admission Rate	325,598	250,083,293	130.20
PQI 14	Uncontrolled Diabetes Admission Rate	104,769	250,081,224	41.89
PQI 15	Asthma in Younger Adults Admission Rate	27,478	96,068,163	28.60
PQI 16	Lower-Extremity Amputation Among Patients with Diabetes Rate	83,722	250,081,200	33.48
PQI 90	Prevention Quality Overall Composite	3,245,330	250,112,071	1297.55
PQI 91	Prevention Quality Acute Composite	769,179	250,088,070	307.56
PQI 92	Prevention Quality Chronic Composite	2,476,179	250,098,616	990.08
PQI 93	Prevention Quality Diabetes Composite	635,807	250,082,008	254.24

*Rate computed among persons with diabetes, Denominator is not a rate, and not all indicators are related to diabetes

Table 2. PQI 01 – Diabetes Short-Term Complications Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	206,095	250,081,195	82.41
Females	98,650	128,202,486	76.95
Males	107,445	121,878,709	88.16
18 to 39 years	94,584	96,068,183	98.46
40 to 64 years	82,859	101,118,733	81.94
65 to 74 years	18,108	30,792,591	58.81
75+ years	10,544	22,101,688	47.71

Table 3. PQI 03 – Diabetes Long-Term Complications Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	289,125	250,081,514	115.61
Females	104,995	128,202,575	81.90
Males	184,130	121,878,939	151.08
18 to 39 years	22,952	96,068,170	23.89
40 to 64 years	152,369	101,118,815	150.68
65 to 74 years	66,255	30,792,675	215.16
75+ years	47,549	22,101,854	215.14

Table 4. PQI 05 – Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	553,573	154,015,167	359.43
Females	333,226	80,915,607	411.82
Males	220,347	73,099,560	301.43
40 to 64 years	230,885	101,118,962	228.33
65 to 74 years	159,967	30,793,208	519.49
75+ years	162,721	22,102,997	736.19

Table 5. PQI 07 – Hypertension Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	156,426	250,081,304	62.55
Females	87,117	128,202,582	67.95
Males	69,309	121,878,722	56.87
18 to 39 years	16,368	96,068,162	17.04
40 to 64 years	69,966	101,118,717	69.19
65 to 74 years	29,152	30,792,598	94.67
75+ years	40,940	22,101,827	185.23

Table 6. PQI 08 – Heart Failure Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	1,103,278	250,088,145	441.16
Females	530,392	128,205,945	413.70
Males	572,886	121,882,200	470.03
18 to 39 years	28,594	96,068,163	29.76
40 to 64 years	300,408	101,119,014	297.08
65 to 74 years	251,526	30,793,837	816.81
75+ years	522,750	22,107,131	2364.62

Table 7. PQI 11 – Community-Acquired Pneumonia Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	443,581	250,084,360	177.37
Females	239,632	128,204,135	186.91
Males	203,949	121,880,225	167.34
18 to 39 years	27,463	96,068,170	28.59
40 to 64 years	121,175	101,118,870	119.83
65 to 74 years	97,191	30,793,027	315.63
75+ years	197,752	22,104,293	894.63

Table 8. PQI 12 – Urinary Tract Infection Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	325,598	250,083,293	130.20
Females	236,423	128,204,107	184.41
Males	89,175	121,879,186	73.17
18 to 39 years	26,515	96,068,166	27.60
40 to 64 years	60,432	101,118,761	59.76
65 to 74 years	60,839	30,792,771	197.58
75+ years	177,812	22,103,595	804.45

Table 9. PQI 14 – Uncontrolled Diabetes Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	104,769	250,081,224	41.89
Females	51,648	128,202,511	40.29
Males	53,121	121,878,713	43.59
18 to 39 years	12,425	96,068,162	12.93
40 to 64 years	42,219	101,118,721	41.75
65 to 74 years	23,434	30,792,606	76.10
75+ years	26,691	22,101,735	120.76

Table 10. PQI 15 – Asthma in Younger Adults Admission Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	27,478	96,068,163	28.60
Females	18,396	47,288,117	38.90
Males	9,082	48,780,046	18.62
18 to 39 years	27,478	96,068,163	28.60

Table 11. PQI 16 – Lower-Extremity Amputation Among Patients with Diabetes Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	83,722	250,081,200	33.48
Females	23,382	128,202,474	18.24
Males	60,340	121,878,726	49.51
18 to 39 years	3,300	96,068,160	3.44
40 to 64 years	45,456	101,118,723	44.95
65 to 74 years	21,243	30,792,608	68.99
75+ years	13,723	22,101,709	62.09

Table 12. PQI 90 – Prevention Quality Overall Composite^a

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	3,245,330	250,112,071	1297.55
Females	1,710,500	128,219,533	1334.04
Males	1,534,830	121,892,538	1259.17
18 to 39 years	257,908	96,068,262	268.46
40 to 64 years	1,080,206	101,122,929	1068.21
65 to 74 years	715,354	30,800,007	2322.58
75+ years	1,191,862	22,120,873	5387.95

^a Composite includes PQI 01, 03, 05, 07, 08, 11, 12, 14, 15 and 16

Table 13. PQI 91 – Prevention Quality Acute Composite^a

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	769,179	250,088,070	307.56
Females	476,055	128,206,830	371.32
Males	293,124	121,881,240	240.50
18 to 39 years	53,978	96,068,179	56.19
40 to 64 years	181,607	101,119,018	179.60
65 to 74 years	158,030	30,793,506	513.19
75+ years	375,564	22,107,367	1698.82

^a Composite includes PQI 11 and 12

Table 14. PQI 92 – Prevention Quality Chronic Composite^a

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	2,476,179	250,098,616	990.08
Females	1,234,456	128,211,345	962.83
Males	1,241,723	121,887,271	1018.75
18 to 39 years	203,930	96,068,233	212.28
40 to 64 years	898,606	101,121,313	888.64
65 to 74 years	557,336	30,797,188	1809.70
75+ years	816,307	22,111,882	3691.71

^a Composite includes PQI 01, 03, 05, 07, 08, 14, 15 and 16

Table 15. PQI 93 – Prevention Quality Diabetic Composite^a

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	635,807	250,082,008	254.24
Females	265,432	128,202,754	207.04
Males	370,375	121,879,254	303.89
18 to 39 years	131,507	96,068,206	136.89
40 to 64 years	297,515	101,118,959	294.22
65 to 74 years	116,811	30,792,795	379.35
75+ years	89,974	22,102,048	407.08

^a Composite includes PQI 01, 03, 14 and 16